

**REMARKS**

Applicant submits that by the present Amendment and Remarks, this application is placed in clear condition for immediate allowance. At the time of the Office Action dated April 2, 2003, claims 1, 2 and 4-6 were pending. Applicant has amended claims 2 and 4, and canceled claims 1 and 5. Care has been exercised to avoid the introduction of new matter. Specifically, claim 2 has been placed in independent form based on independent claim 1 upon which claim 2 depends. Claim 4 has also been amended to include the limitations disclosed in the specification. Adequate descriptive support for the amendment of claim 4 can be found on, for example, page 13, line 31 to page 14, line 17; and Figs. 11 and 12.

The Office Action has rejected claims 1 and 5 under 35 U.S.C. §102(b) as being anticipated by Ito et al. By this Amendment, claims 1 and 5 have been canceled, thus obviating the rejection. Accordingly, withdrawal of the §102(b) rejection is respectfully requested.

**Claim 2 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ito et al. in view of AAPA Figs. 13 and 14.**

In response to January 9, 2003 Remarks arguing that "the impedance adjustment devices of Ito are not equivalent devices to impedance conversion circuits," the Examiner mentioned the following two points and based on these two, asserted that "two impedance conversion techniques [disclosed by AAPA and Ito et al.] are considered equivalent."

- (1) Ito et al. teaches the impedance may be changed by changing the width of the arm, which is utilizing the distributive property.
- (2) AAPT also utilizes the distributive properties of the lines to convert the impedance by controlling the length.

Applicant submits that in imposing a rejection under 35 U.S.C. §103, the Examiner is required to make a "thorough and searching" factual inquiry and, based upon such a factual inquiry, explain **why** one having ordinary skill in the art would have been realistically impelled to modify particular prior art, in this case Ito's particular semiconductor amplifier, to arrive at the claimed invention. *In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). The factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority, but must be based on objective evidence of record. *In re Lee, supra*. Merely identifying features of a claimed invention in disparate prior art references does not, automatically, establish the requisite motivation for combining references in any particular manner. *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999); *Grain Processing Corp. v. American-Maize Products Co.*, 840 F.2d 902, 5 USPQ2d 1788 (Fed. Cir. 1988).

In applying the above legal tenets to this case, it is apparent that the Examiner has **not** established the requisite motivational element. The Examiner has merely pointed to the acknowledged prior art and then announced, one skilled in the art would have been motivated to have substituted the art-recognized equivalent means of impedance matching disclosed in the AAPA in place of the impedance matching means in the device of Ito et al. because such a modification would have been considered a mere substitution of art-recognized equivalent impedance matching means (the ninth enumerated paragraph of the non-final Office Action dated August 9, 2002).

First, the Examiner is questioned: **where** in the prior art of record discloses that the impedance conversion circuit 106 of AAPA and the description of impedance adjustment technique in Ito et al. are **the art-recognized equivalent means of impedance matching**. Second, the Examiner is questioned: **where** in the prior art of record discloses motivation to

substitute the AAPA's impedance conversion circuit 106 for the Ito's impedance adjustment technique. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation or suggestion to select and combine the references. *In re Lee, supra*. Applicant submits that the Examiner did not show any factual basis of his assertion supported by objective evidence of record.

It should, therefore, be apparent the a *prima facie* basis to deny patentability to the claimed invention has **not** been established for lack of the requisite factual basis and warranted the requisite realistic motivation. Applicant solicits reconsideration of claim 2 and the prior art of record, and solicits withdrawal thereof.

**Claims 4 and 6 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ito et al. in view of Carter et al.**

In the statement of the rejection, the Examiner admitted that Ito et al. does not show the isolators formed at the branch portions of the distributors and combiners. Nevertheless, the Examiner cited Carter et al., asserting that it teaches using a non-reciprocal circulators as the combiner/divider in a similar amplifier arrangement to the Ito et al. The Examiner then concluded that it would have been obvious to have placed the circulator and to have an added additional port in order to form a non-reciprocal isolator/combiner-divider in the amplifier circuit of Ito et al. as taught by Carter et al.

In response to this rejection, Applicant has amended claim 4 to include the following limitations.

first isolator placed at the branch portion of said distribution circuit, the first isolator including an input port, an output port, and a third port each having two

terminals, wherein one of the terminals of the input port is connected to the signal input terminal and the other terminal is grounded, both of the terminals of the output port is each connected to the corresponding first lines, and one of the terminals of the third port is connected to a terminal resistor and the other terminal is grounded; and

second isolator placed at the combined portion of said synthetic circuit, the second isolator including an input port, an output port, and a third port each having two terminals, wherein both of the terminals of the input port is each connected to the corresponding second lines, one of the terminals of the output port is connected to the signal output terminal and the other terminal is grounded, and one of the terminals of the third port is connected to a terminal resistor and the other terminal is grounded.

Applicant submits that Ito et al. and Carter et al. are silent on the above limitations. Thus, consideration of the teachings of Ito et al. and Carter et al., either individually or in combination, would not have suggested each and every limitation of claims 4 and 6. Applicant, therefore, solicits withdrawal of the rejection of claims 4 and 6.

#### **Conclusion.**


It is thus urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

09/893,898

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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